

S/N 09/657,404

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Weimin Sun et al. Examiner: Oropeza, Frances P.  
Serial No.: 09/657,404 Group Art Unit: 3413  
Filed: September 8, 2000 Docket: 279.279US1  
Title: Improved Rate-Adaptive Therapy with Automatic Limiting of Maximum Pacing Rate

AMENDMENT AND RESPONSE TO FIRST OFFICE ACTION

Commissioner for Patents  
Washington, D.C. 20231

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FEB 20 2003

Sir:

TECHNOLOGY CENTER R3700

Applicant responds as follows to the Office Action dated October 1, 2002. A one-month extension of time in which to respond is requested.

IN THE CLAIMS

Please replace claims 1, 3, 5, 7, 10, 11, 13-15, 17, 19-21, and 24 with their corresponding claims in the appendix entitled "Clean Version of the Amended Claims." The replacement claims are intended to reflect the specific amendments as set forth below.

1. (Amended) A method for operating a rate-adaptive pacemaker wherein measured exertion levels in [the] a patient are mapped to a sensor indicated rate by a rate response curve, comprising:

automatically determining the patient's maximum exercise capacity as defined by a long-term maximum exertion level by collecting maximum measured exertion levels over a specified period of time;

wherein the rate response curve is defined such that an exertion level corresponding to the patient's maximum exercise capacity would be mapped to a physiologically favorable maximum rate, MAR;

limiting the [rate mapped by the rate response curve] sensor indicated rate to a specified maximum sensor indicated rate MSR that is independent from the MAR; and,

increasing the MSR after a specified time period [time] during which the long-term maximum exertion level is updated.